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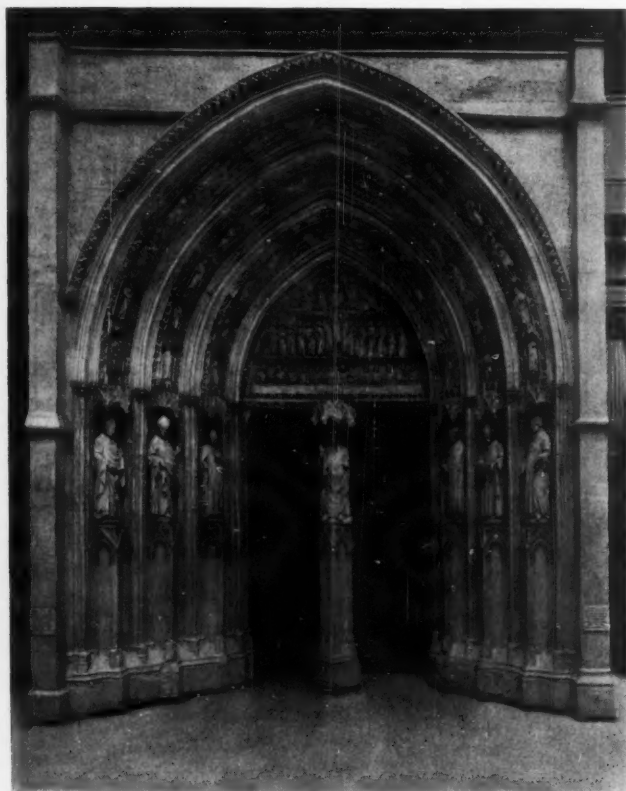
MAGAZINE

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VOLUME II PITTSBURGH, PA., SEPTEMBER 1928 NUMBER 4



THE NORTH TRANSEPT OF SAINT-ANDRÉ
AT BORDEAUX

(See Page 110)

THE CARNEGIE MAGAZINE

THE CARNEGIE MAGAZINE

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VOLUME II NUMBER 4
SEPTEMBER 1928

Come out, 'tis now September,
The hunter's moon's begun.

—ELIZABETH STIRLING BRIDGE,
"All Among the Barley"

—3D—

HOURS OF ADMISSION—ALWAYS FREE

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From October to July. Every Saturday evening at 8:15 o'clock, and every Sunday afternoon at 4:00 o'clock.

—CHARLES HEINROTH, Organist

—3D—

The Carnegie Institute, in the broadest sense, holds its possessions in trust for mankind and for the constant welfare and happiness of the race. Anyone, therefore, who by a gift of beautiful works of art, or objects of scientific value, or a donation to its financial resources, aids in the growth of these collections and the extension of its service is contributing substantially to the glorious mission of the Institute.

The Carnegie Institute will be the final home of every worthy collection of pictures and museum objects when the men and women who have chosen them wish to have the world enjoy them.

—ANDREW CARNEGIE

The CARNEGIE MAGAZINE freely grants permission to newspapers and magazines to reprint without limit the articles that appear in its pages.

A PROPHECY COME TRUE

Mr. Robert Wardrop, of the First National Bank at Pittsburgh, sends this correspondence to the CARNEGIE MAGAZINE. As the Magazine is non-partisan it is ready to print any similar pleasantry concerning Governor Smith.

June 16, 1928

Dear Mr. Hoover:

No doubt you remember when we had the Campaign in Pittsburgh for the Starving People in Russia, I was Chairman of the Pittsburgh Committee. We had dinner at the Duquesne Club and because of the fact that about forty people came to the dinner who had not accepted our invitation, we were delayed from thirty to forty minutes. During that delay you and Mr. A. W. Mellon were standing in the front room when Colonel Church approached you and said, "I hope that I am now addressing two members of our next Presidential Cabinet." His prediction was correct.

Could I see you personally at this time, I would say that I hope and feel confident that I am now addressing the next President of the United States.

Sincerely yours,
ROBERT WARDROP

THE SECRETARY OF COMMERCE

Washington, D. C., June 18, 1928

My dear Mr. Wardrop:

Many thanks for your letter of congratulations.

I greatly appreciate the fine note of friendship it conveys.

Yours faithfully,
HERBERT HOOVER

BON JOUR, MR. HUGHES!

Charles Evans Hughes has been chosen by the unanimous vote of all the civilized countries of the world as one of the eleven judges of the Permanent Court of International Justice. America, in her ardent desire for peace, could not be represented by a stronger personality or a more eloquent voice.

MR. SMITH ON PEACE

We must help build the machinery for peace. The hopes and fears of every father and mother in our land cry out for it.

Let no man say that this is mere sentimentality. The broken heart of a stricken mother is the most real thing in life. We must come together with other nations to end war.

MR. HOOVER ON PEACE

Our foreign policy has one primary object and that is peace. We have no hates; we wish no further possessions; we harbor no military threats. The unspeakable experiences of the Great War and the narrow margin by which civilization survived from its exhaustion are still vivid in men's minds. There is no nation in the world today that does not earnestly wish for peace—that is not striving for peace.

THE ANDREW CARNEGIE BIRTHPLACE MEMORIAL BUILDING

By JAMES SHEARER, *Architect*



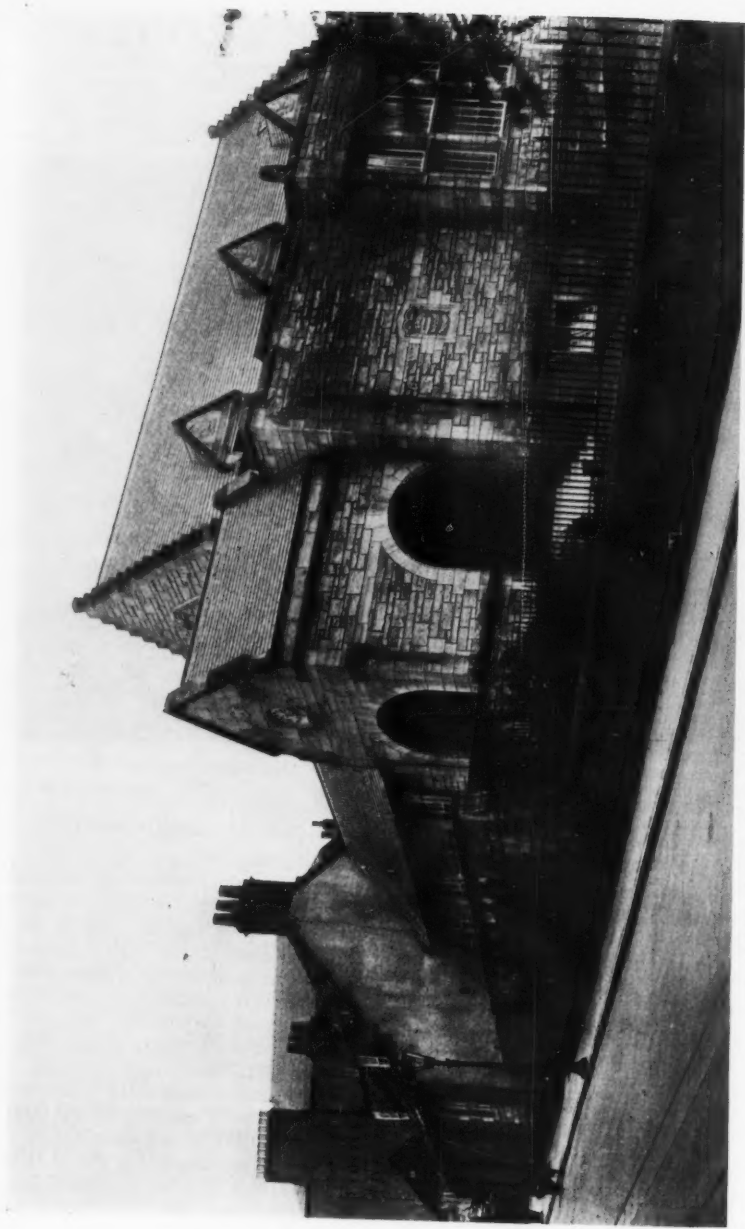
GROUP TAKEN AT OPENING OF MEMORIAL

Front row reading from left to right: Miss Louise Miller, Mr. Roswell Miller, Mrs. Roswell Miller, Master Robin Miller, Mrs. Carnegie, Sir John Ross, the Countess of Elgin.

Second row: Rev. Robert Stevenson, Dr. F. P. Keppel, Mrs. James Norval, the Rt. Hon. the Earl of Elgin, Mrs. J. C. Macbeth.

On the afternoon of Thursday, June 28, 1928, the Andrew Carnegie Birthplace Memorial Building at Dunfermline was formally opened to the public by Mrs. Carnegie and her daughter, Mrs. Roswell Miller, in the presence of a large and representative gathering of Dunfermline citizens, members and officials of the several Carnegie Trusts, and personal friends of the Carnegie family. At Mrs. Carnegie's request the proceedings were of a quiet and simple nature, and the building, with funds for its endowment, was handed over to the care of the Carnegie Dunfermline Trust.

As a possible locality for the Memorial, two cities had outstanding claims to consideration, one in Scotland, the other in the United States—Dunfermline, where Mr. Carnegie was born, and Pittsburgh, in which, after many years of hard work, he rose to eminence. But the associations identified with the little house in which he was born, and to which in after years he returned so often and so affectionately in thought, in allusion, and in an ever-present solicitude for the welfare of the ancient city of his parentage, stood forth irresistibly as determining



THE MEMORIAL BUILDING WITH THE BIRTHPLACE COTTAGE ON THE LEFT

conditions. The birthplace cottage itself decided the issue, and the Memorial has been built beside it.

From Mrs. Carnegie this very generous and generous idea emanated, and to her inspiration also must be attributed the general conception of its plan, form, and purpose. In every aspect of the building, from the initial stages of consultation over the first sketch plans to the final placing of the objects comprising the wonderful collection that the building now contains, she has taken the closest personal interest.

A number of years ago she purchased the various properties that occupied the lands immediately surrounding her husband's birthplace. The lands were subsequently cleared of all their buildings, and an open square, or playing park for children, was set out with frontages to three streets, on the north to Priory Lane, on the west to Moodie Street, and on the south to Rolland Street. Only the birthplace cottage—a typical example of a Scottish artisan's dwelling at the beginning of the nineteenth century—was left intact in the angle at the extreme northwest corner of the square; and thus it stood for many years, a familiar landmark to the townsfolk of Dunfermline and a point of interest to visitors from all parts of the world. In direct relationship to the cottage the new Memorial Building has been designed and built.

For his guidance the architect was set to work with the following expression of Mrs. Carnegie's desire:

- (a) That the familiar appearance of the cottage should not be changed in any way. That the new building should not dominate the cottage and that the cottage should form an integral part of the scheme.
- (b) That the style of the new building should be Scottish, its characteristics having reference to the surroundings in which Mr. Carnegie spent his childhood.
- (c) That the building should be

simple and unostentatious in treatment.

- (d) That it should not encroach unduly on the area of the park.
- (e) That internally it should be a cheerful, well-lighted building with nothing pretentious about it.

The entrance to the cottage, as formerly, is from Moodie Street. So also is the principal entrance to the new building. The lower part of the cottage was not occupied formerly by the Carnegie family. It was a separate tenancy and has now been altered to be used as an anteroom, giving, on the one hand, direct access to the birthplace, and, on the other, access to a wide entrance corridor that links the new building, with its collections, to the cottage, with its family associations. Except for reopening an old door for access to the anteroom, no alteration has been made on the cottage. The back room has been refitted as a handloom workshop, with a handloom equipped, mounted, and in full working order.

The Collection House consists of six alcoves, three on each side of a central hall. The middle alcoves of each group of three are arranged to provide deep recesses and large oriel windows for the convenient exhibition of caskets, keys, bound addresses, and objects of a similar kind. The end alcoves are lighted from the roof, so that the entire wall space is available for the framed addresses, photographs, and other records that they contain.

A private door from an alcove at the inner end of the Collection House communicates with the curator's house. The whole of the interior woodwork is executed in Austrian figured oak, wire-brushed and fumed. The plaster work is finished to a rough-surface texture and is coloured to a deep shade of cream.

In style, the building is Scottish, its detail having been derived from that of the seventeenth century of the Scottish Lowlands. Mouldings, carvings, sur-

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face texture, stone jointing, crow-step gables, stone roof dormers—all have their local and peculiar characteristics, and while such details have not been pedantically copied from old examples, there has been an effort to find in local building tradition a starting point from which to design a modern building in harmony with a Scottish medieval town.

The masonry is of a cream-coloured sandstone from a west Fife quarry. The slates are Cornish—a grey lichen green with a tinge of buff that blends harmoniously with the cream colour of the walls.

The building is ornamented by carvings which refer to the main groups of interest that Mr. Carnegie sought to benefit, to his citizenship of two great countries, and to other personalia.

Bewilderingly diverse as his benefactions were, it was found that for purposes of sculptural representation, they could be broadly classified under four distinct heads: Discovery, Peace, Heroism, and Industry, and these are the subjects of the symbols carved on the four important panels of the north and south elevations. Thus, libraries, university foundations, and research foundations are symbolized under the word Discovery by an explorer's ship at sea—all forms of art and learning being interpreted as a quest. The ship flies the burgee of the Washington Institution.

A second panel symbolizes Mr. Carnegie's industrial career, from which

all else developed. Steel retorts, blast furnaces, a crane, and a steel bridge are grouped with reference to Mr. Carnegie's associations with the steel industry. A winged wheel symbolizes the important part he played in the early development of American railways, and telegraph poles refer to his modest beginning in life as a telegraph clerk.

A third panel, a dove with sprig of olive under the word Peace, commemorates his vast gifts towards International Peace, as exemplified in the foundation of the Peace Palace at The Hague, the Pan-American Union, and the Church Peace Union.

The remaining panel, bearing a flaming heart wreathed with oak leaves, under the word Heroism, symbolizes his international foundations for the reward of individual heroism, or the relief of dependents of those who have lost their lives in attempting to save

the lives of others.

A panel over the front arch of the main entrance porch, by way of reference to the trade of Mr. Carnegie's parents when they occupied the cottage adjoining, bears a weaver's thread-winding wheel with a proverb inscribed that Mr. Carnegie was fond of quoting,—“The gods send thread for a web begun.”

A tympanum over the west window of the main hall contains a shield with the cross of St. Andrew and a shield with the Stars and Stripes, referring to the countries of Mr. Carnegie's birth and adoption.



LONGITUDINAL INTERIOR
LOOKING TOWARDS INNER END

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Within the porch, at the side of the main entrance door, there is carved in plain Scots lettering, the following inscription:

THIS BUILDING
IN LOVING MEMORY OF
ANDREW CARNEGIE
IS THE GIFT OF HIS WIFE
LOUISE WHITFIELD CARNEGIE
TO HIS NATIVE TOWN

Near the south arch, which gives access from the porch to the park, there has been placed, in commemoration of an incident in Mr. Carnegie's childhood, a small drinking fountain for children. It is made from granite from the Migdale Rock at Skibo, Mrs. Carnegie's Scottish Highland home, and is the gift of Mr. and Mrs. Roswell Miller.

To the records of Mr. Carnegie's life in Pittsburgh, and to the deeply interesting accumulation of results, brought together by the good offices of the directorate of the Pittsburgh Institute, an entire alcove has been devoted. A corresponding alcove contains an imposing collection of illuminated transparencies of the several departments of research and of the published works of the Washington Institution. Two alcoves contain a collection of presentation keys, trowels, mallets, caskets and their scrolls. A fifth contains miscellaneous addresses and acknowledgments from American sources, and a sixth a similar collection from sources within the United Kingdom.

Bound addresses and books are displayed in manuscript cases in the mid-floor of the central hall. Addresses of international origin are arranged on the walls of the connecting corridor and anteroom; and over the fireplace of the anteroom the flag of Pittsburgh, presented by the Historical Society of Western Pennsylvania, supplies a note at once significant and of high decorative value.

A life size portrait of Mr. Carnegie, in his robes as Rector of St. Andrews University, has been placed in an ap-

propriate setting in the centre of the end wall of the main hall fronting the entrance. The portrait is by Mr. H. R. Butler and is a replica of the portrait in the library of the art school of the Carnegie Institute of Technology of Pittsburgh.

In addition to the vivid and convincing records of vital activity so generously sent to the Memorial by the Pittsburgh Institute and the Washington Institution, important records of work accomplished and in progress, in the form of published works, charts, and photographs, have been sent by the Carnegie Corporation of New York; the Carnegie Endowment for International Peace, Washington; the Carnegie Foundation for the Advancement of Teaching, New York; the Church Peace Union, New York; and the Carnegie Hero Fund Commission, Pittsburgh; the Carnegie United Kingdom Trust, the Scottish University Trust, and the Carnegie Dunfermline and Hero Fund Trusts.

The collection is therefore something more than an impressive record of transactions that have passed. It stands as a convincing demonstration of the continuing and vigorous life of innumerable institutions that are being used by multitudes of people, which are affecting the lives of successive generations of these people, directly and indirectly, consciously and unconsciously, every day, and in every part of the world.

PREACHERS IN POLITICS

No sound ought to be heard in the church but the healing voice of Christian charity. The cause of civil liberty and civil government gains as little as that of religion by this confusion of duties. Those who quit their proper character to assume what does not belong to them are, for the greater part, ignorant both of the character they leave and of the character they assume. Wholly unacquainted with the world, in which they are so fond of meddling, and inexperienced in all its affairs, on which they pronounce with so much confidence, they have nothing of politics but the passions they excite. Surely the church is a place where one day's truce ought to be allowed to the dissensions and animosities of mankind.

—EDMUND BURKE

THE TWENTY-SEVENTH INTERNATIONAL EXHIBITION OF PAINTINGS

SHERWOOD ANDERSON was asked by a college professor to explain the way in which he writes his short stories. His reply was that the method could no more be described by a successful writer than a course in love-making could be given by a great lover. And he continued, "You know that is one thing I like about painters. Most of them let someone else do the explaining. They paint. Ask one of them to tell you how he felt at a certain moment, how he held the brush in his hand, and all the rest, and he would tell you to go to Pittsburgh."

The Twenty-seventh International Exhibition of Paintings will open on the afternoon of Founder's Day, October 18, and fifteen European nations will be represented. Switzerland will have a group for the first time. In all about 275 works will come from Europe, while the United States will be represented by about 130 paintings.

The method of selecting the pictures, inaugurated for the last International, will be continued, each directly invited artist being asked to send from three to five canvases. "This new plan was decided upon," said Mr. Saint-Gaudens, "to meet the desire generally expressed by European and American artists that each exhibitor be represented by more than one painting. The painter feels that we can in this way acquaint the public with his full personality and his artistic development. It is easier to judge the talent of an artist and to form an opinion of his work when basing one's judgment on more than a single canvas. No artist can strike twelve with each picture he paints, and one painting is not necessarily a criterion of an artist's importance."

The Jury of Award will meet on Sep-

tember 18 to award the prizes. This able jury is comprised of two European members, Anto Carte of Belgium and Colin Gill of England, and two American members, Ernest Lawson and Rockwell Kent.

Mr. Carte first exhibited in this country at the Twenty-first International in 1922. The following year his painting, "Descent from the Cross," was awarded Honorable Mention, and the year after that his "Madonna with Musicians" became the center of interest in the Belgian section. In 1925 the Carnegie Institute held a special exhibition of Carte's paintings, and in the last International one of his group of five pictures was awarded Second Prize. This painting, "Motherhood," was later presented to the Carnegie Institute by Walter May of Pittsburgh.



ANTO CARTE

Anto Carte was born at Mons, Belgium, in 1886, of a long line of wood carvers. At the age of sixteen he left school and was apprenticed to a decorator. For a short time he studied at the Academy of Fine Arts in Mons and at eighteen he secured a scholarship at the Brussels Academy, where he remained three years. Another scholarship took him to Paris from 1910 to 1912, and he had returned to Belgium but a short while when the war broke out. He joined the Civil Guards but on the advance of the Germans he was arrested and sent to prison at Namur, where he was soon freed under surveillance until the Armi-

stice. During this long period of circumscribed activity he made illustrations for some of the poems of the genial Belgian, Emile Verhaeren, whom he had met in 1913 and whose philosophy of life and broad human sympathy he shared. After the Armistice, at the Salon des Beaux Arts in Brussels, he exhibited "Pietà" and "Mater Dolorosa," which gave him a distinguished place among Belgian artists.



COLIN GILL

Colin Gill was born in London in 1892 and studied art at the Slade School, London. In 1913 he was awarded the first English Prix de Rome. At the outbreak of the war in 1914 he became an officer in the artillery. Later he was associated with two noted French painters, de Segonzac and Forain, in camouflage work on the Western Front. In 1918 he was appointed official artist with the Army and painted a number of large war pictures now in the War Museum, London. After the war he specialized in decorative mural paintings and portraiture. Among others, he painted Sir Alfred Mond, Ramsay Macdonald, and Bernard Shaw. He was elected a member of the International Society of Painters in 1925, and of the New England Art Club in 1926. Last year he did a large fresco of King Alfred's fleet defeating the Danes, for St. Stephen's Hall in the British Parliament, London. He is represented in the Tate Gallery, London, by a picture presented to that gallery by Sir Joseph Duveen.

Mr. Gill first exhibited at the Carnegie Institute in 1923 at the Twenty-second International, and he will have a group of five paintings this year.



ROCKWELL KENT

Rockwell Kent is recognized as one of America's most original painters. He is well-known as an illustrator and has achieved distinction in the field of literature as well as art. He was born at Tarrytown, New York, in 1882, and was educated at the Horace Mann School, later studying architecture for a time at Columbia University. In painting he was a pupil of such masters as Chase, Thayer, Henri, and Hayes Miller.

Mr. Kent has written and illustrated "Wilderness," which is a record of his adventures some years ago with his son during a winter when they stayed on Fox Island, Alaska. It is a unique contribution to American literature. He has also written "Voyaging," an account of his visit to Tierra del Fuego in a 26-foot boat.

He had a group of five paintings in last year's International, one of which, "Annie McGinley," was purchased by the Institute for its permanent collection. He was also a member of the Jury of Award for the Twenty-third International.



ERNEST LAWSON

Ernest Lawson, who is one of America's most distinguished landscape painters, was born in California in 1873. He first studied in Kansas City, then at the Artists League in New York, and still later in Paris. Since his return to this country in the '90's, he has maintained a studio in New York. The National Academy of Design

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elected him an Associate in 1908 and an Academician in 1917.

He has won medals and awards virtually from all institutions that offer them in the United States, and he is represented in many permanent collections. He has exhibited in Carnegie Internationals for many years and in the Twentieth was awarded First Prize for his painting, "Vanishing Mists." This picture, which is considered by many as one of the finest landscapes painted by an American artist, was purchased by the Institute for the permanent collection. In the summer of 1925 there was a special exhibition at Carnegie Institute of forty canvases by Mr. Lawson.

In addition to the invited paintings, pictures will be chosen from those submitted to a jury of American painters. This jury met in New York on September 6 and will meet again in Pittsburgh on September 17, and only paintings by American artists will be considered.

Great Britain will be represented by such artists as Brangwyn, Sims, Laura Knight, Dod Procter, and Underwood; France by Besnard, Blanche, Bonnard, Derain, Laurencin, Lucien Simon, and Picasso; Italy by Gaudenzi, Marussig, Bucci, and Conti; Spain by Rusinol, Martinez-Cubells, Ramón de Zubiaurre, and Dali; Germany by Liebermann, Wollheim, and Schmidt-Rorluff; the Scandinavian countries by Liljefors, Sörensen, and Krohg; Russia, by Konchalovsky, Petrov-Vodkin, and Soudeikine; Poland, by Rudnicki and Boznanska; Holland, by Monnickendam and Sluyters; Belgium, by Buisseret, Strebelle, and Saverys; Austria, by Hammer and Wiecele; Czechoslovakia, by Obrovsky and Benes; and Switzerland, by Blanchet and Barth.

The list of invited artists for the United States includes the names of Anthony Angarola, Bryson Burroughs, John Carroll, Charles H. Davis, Thomas W. Dewing, Edwin Dickinson, Guy Pène Du Bois, John R. Grabach, Samuel Halpert, Johanna K. W. Hailman,

Childe Hassam, Edward Hopper, Ernest Lawson, Hayley Lever, Jonas Lie, Jerome Myers, John Noble, H. Amiard Oberteuffer, H. E. Schnakenberg, Edmund C. Tarbell, Allen Tucker, Horatio Walker, Frederick J. Waugh, and Mahonri Young.

After the close of the exhibition in Pittsburgh on December 9, the European section will be shown in Cleveland, at the Cleveland Museum of Art, and in Chicago, at the Art Institute.

MEMBERSHIPS FOR OUR FRIENDS

MEMORIAL BENEFACTOR	
By gift or devise . . .	\$1,000,000.
MEMORIAL PATRON	
By gift or devise . . .	500,000.
ENDOWMENT FELLOW	
By gift or devise . . .	100,000.
ENDOWMENT FRIEND	
By gift or devise . . .	50,000.
ENDOWMENT DONOR	
By gift or devise . . .	25,000.
ENDOWMENT GIVER	
By gift or devise . . .	10,000.
SUSTAINING MEMBER	
Annually . . .	1,000.
CONTRIBUTING FELLOW	
Annually . . .	250.
SUBSCRIBING MEMBER	
Annually . . .	100.
SUBSCRIBING FRIEND	
Annually . . .	50.
MEMBER	
Annually . . .	10.
NON-RESIDENT MEMBER	
Annually . . .	5.

"That one at the top," said one of the Trustees, "will be lonesome for a while!"

But will it?

ENGINEERING AS A PROFESSION

By WILLIAM E. MOTT

Director, College of Engineering, Carnegie Institute of Technology



Most high school students have some idea about what they would like to do when they have finished their school or college courses. But often they know very little about the profession which they have picked

out—what qualities a man should have to be successful in it, what kind of training he should follow, what kind of work he will do. The preparation that is necessary to become a physician, a minister, or a lawyer is pretty well understood. One goes to a medical school, a theological school, or a law school; and you all know in a general way the duties of physicians, ministers, and lawyers. But there are other lines of work or callings about which you probably have very hazy ideas.

Engineering is a comparatively new profession—much younger than those that I have mentioned. The first school for the training of engineers was founded only a little over a hundred years ago. It is true that there have been men who have done some of the same sort of work that the modern engineer does, since the days of the ancients. But these men have usually been soldiers, interested in the building of fortifications and roads, for we must remember that the great highways of antiquity were constructed chiefly for the convenience of armies. And the men who built the roads were forced to build bridges and sometimes canals, so that a good deal was known about some branches of engineering before anyone even thought of considering

the road builder or the bridge builder or the canal builder as a member of a special profession.

The invention of the steam engine made a great change in our manner of living. Men discovered that steam could do all sorts of tasks which formerly had been performed by human hands or by water power. The men who designed or invented these new machines and engines in time came to be known as engineers.

Later it was found out that electricity could be made very useful and could take the place of steam in certain kinds of work, and there came into being a class of men who devoted themselves to the study of electricity and to putting into everyday use electric power. These men became known as electrical engineers.

And so, as our knowledge of science has become greater and greater, men have tried to make scientific knowledge useful and practical. They have derived ideas from physics, chemistry, mechanics, and mathematics that have helped them to invent machines and methods of doing work which have made life more comfortable and labor less difficult. This will explain to you in a general way how this profession of engineering came into being.

You have often heard it said that we are living in a mechanical age. That this is the day of machinery is due largely to the engineer. It is natural, therefore, that this profession is one of the most popular at the present time. It has grown more rapidly than that of the lawyer, or minister, or doctor. And it is likely to increase in popularity rather than to decrease, because we are always looking for methods of doing work more quickly and easily.

Nearly every young man is interested

in machinery of some kind or other, but because you know something about the automobile or the radio, it is a mistake to believe that, on that account, you will be a successful mechanical or electrical engineer. You must have also the kind of knowledge which can be gained only from books.

Some of you are thinking about preparing yourselves for this profession. You are asking yourselves, "Shall I study engineering?" Here is a definition of engineering given by Dr. George F. Swain, of Harvard University: "Engineering is the science and art of applying, economically, the laws, forces, and materials of nature, for the use, convenience, or enjoyment of man." This means in order to become a successful engineer you must learn something about the principles of science—what are commonly called the laws of nature. You must know chemistry and physics—the more the better; mechanics, or the laws which govern the behavior of bodies, whether at rest or in motion. You must study the materials to be used by the engineer—their composition, properties, manufacture, life; and then you must study mathematics. In fact, in trying to answer the question, "Shall I study engineering?" you should first ask yourself, "Am I willing to spend two years after I enter college studying mathematics?" If your marks in high school are very poor, if you have no interest whatever in this subject, the chances are you will not make a successful engineer. If you become an engineer you will not have to spend your life solving mathematical problems, but a good working knowledge of mathematics gives one a command of methods and ways of looking at problems, which cannot be obtained otherwise.

Do you like drawing? It is sometimes said that a good draftsman is born not made; but much can be done in the way of developing a knowledge of the principles used in the mak-

ing of drawings. Engineering drawing and descriptive geometry provide the means whereby the engineer puts on paper his designs and plans for the carrying out of his designs.

Chemistry, physics, mathematics, and drawing are the basic courses for the training of engineers. Then there are the shop and laboratory courses which are generally required. The engineer is often compelled to direct the work of mechanics; therefore, he ought to learn something about mechanical processes in his college course. Dr. Swain says, "The engineer must know and must also be able to do. The important thing is the knowing, or the science. The engineer may not actually do a great deal with his hands, but he must at least know how to do it should it be necessary." Hence the need of training in shop work.

Some instruction in the art of surveying is desirable for all engineers, and subjects of a more general nature must be studied, since the engineer has certainly as great need for a knowledge of English, history, foreign languages, and economics as any professional or business man.

The engineering student should not get the idea that a four year course of study, in any college or university, will make an engineer of him. When he is graduated he is just ready to begin the practical work of his profession. He should have learned the "engineer method," that is, how he should attack a problem, how to analyze and study it, before he draws his conclusions or lays out his design.

The engineer must have an excellent understanding of the English language and be able to speak and write clearly. The successful man in any profession should have some knowledge of foreign affairs. Therefore, the study of one or more of the foreign languages is desirable. History and economics are important aids in many phases of engineering work.

If you wish to become an engineer,

get as broad an education in your preparatory school as possible, because the wider and more thorough your training the greater are your chances of success. Do not specialize on technical subjects in your school course. These will come later. Learn as much English as possible, study especially mathematics, foreign languages, history, physics, and chemistry.

In alphabetical order the commoner branches of engineering are as follows: Chemical, Civil, Electrical, Mechanical, Metallurgical, and Mining Engineering. There is also a new group of courses now offered in many institutions which attract a large number of young men. They bear such names as Administrative, Commercial, Industrial or Management Engineering. These courses emphasize the business side of engineering work rather than design, construction, and operation, but they include those subjects which are basic in all engineering work.

Now a few words about the different branches of engineering. Chemical engineering deals with the manufacture of those articles which involve chemical reactions. The student follows a rather wide variety of courses in chemistry; and, in addition, he has some instruction in the elements of electrical and mechanical engineering. He must know something about the general principles of engineering because the chemical engineer may be called upon to design, build, and operate a plant which will make chemical products.

The civil engineer, so called in the early days to distinguish him from the military engineer, is the man who designs and constructs buildings and bridges; railways, roads, and streets; waterworks, sewerage systems, and irrigation plants; canals, harbor works, and river improvement projects. His work is very diversified and he is often required to move from place to place as one project is completed and another started.

Electrical engineers design, manu-

facture, install, and operate electrical machinery and appliances. Power transmission, transportation by electrical power, and the various systems of communication by means of electricity are the main subdivisions of the field of electrical engineering.

The mechanical engineer has much in common with the electrical engineer. He deals with the production of power from fuel, water and wind and its transmission; the design and manufacture of hand and machine tools; the design and building of steel plants and other machinery in endless variety; the automobile and airplane and many other products.

The work of the metallurgical engineer is not so well understood as that of other engineers, although it offers attractive opportunities to young men interested in science. The metallurgical engineer has to do with the extracting of metals from the minerals or ores and in working these metals into forms which can be used in commerce. He must know their properties and treatment in order to fit them for uses in our everyday life.

Mining is one of the oldest occupations. Through it we obtain much of the raw material which we need for commerce and manufacture. The main divisions of mining are metal mining and coal mining. Coal mining is growing in importance and many mechanical improvements are being made in the coal fields, so that a young man well trained in mining theory and practice will find excellent openings and many opportunities for advancement.

There are certain subdivisions of the work of all engineers. First comes design—not that the young graduate begins his practical work by designing machines and structures, or drawing up plans and projects. Far from it! Years of apprenticeship and training may be necessary before he can originate or create something new. Designing is one of the chief functions of the engineer. Construction and manufacturing

are the same thing, though we say civil and mining engineers construct their bridges or mining structures, while the chemical, electrical, mechanical, and metallurgical engineers manufacture their machines or products.

But the engineer's design will not run itself. It must be looked after, guided, supervised, directed; and many engineers are employed in these tasks which may be summed up by the words operation and administration. The management of employees is usually one of the duties of an operating engineer. There are also many opportunities for young men to become sales engineers.

Finally, research offers an attractive field of work for the engineering graduate. A few men are eager to take up what is commonly called pure research; that is, the search after new scientific discoveries. Applied or commercial research has to do with the making of new materials or the discovery of new and simpler ways of doing things.

The engineer leads a strenuous life and good physique and sound health are important. A physical handicap will limit one's opportunities in the way of employment. It must always be remembered that the college course is the beginning of the technical training. The successful engineer remains a student to the end of his days, and book learning must keep pace with technical knowledge and skill.

With intelligence, good training, good health, a liking for creating things, an ability to work hard and be patient, the young engineer need not worry about opportunities for advancement. They will come to him as he shows his ability to accept responsibility and to do well whatever he is assigned to do.

True education can be obtained outside of the schools; genius is not an indigenous plant in the groves academic—a wild flower found in the woods all by itself, needing no care from society—but the average man needs universities.

—ANDREW CARNEGIE

THE NORTH TRANSEPT OF SAINT-ANDRÉ

THE lovely portal of the north transept of the cathedral of Saint-André at Bordeaux, presented on the cover, is thoroughly characteristic of French Gothic of the end of the thirteenth century. The same general motive and splendor of composition of earlier Gothic is here maintained, but the treatment is more unquiet. The mouldings are liney, and there is a lack of breadth in the surfaces. But it is none the less very noble architecture and is worthy to stand in the Hall of Architecture as the French Gothic representative.

Bertrand de Goth, ancient architect and archbishop of Bordeaux, had much to do with its execution. Bertrand was an artful figure in early church history who, by intrigues with Philip the Fair of France, was raised to the papacy as Clement V (1305-1314). It was under Clement that the seat of the papacy was removed from Rome to Avignon. Thus the cathedral was begun in his episcopate and finished under his auspices as Pope.

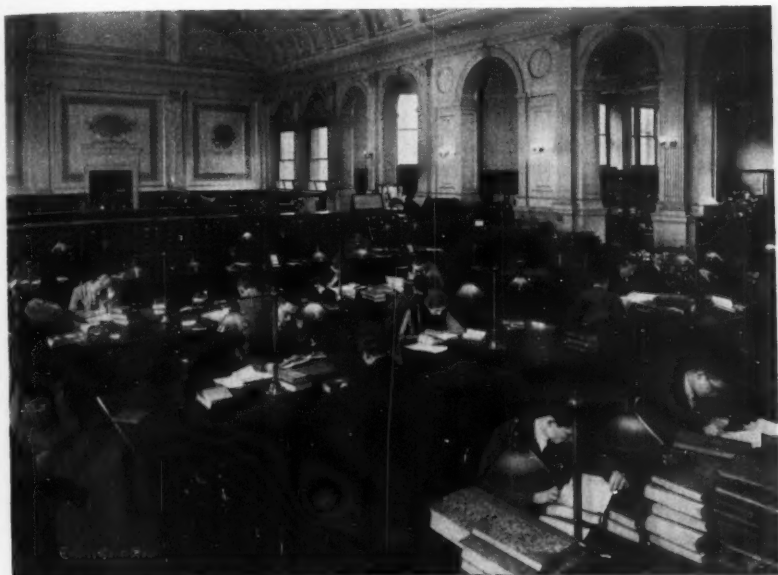
This accounts for the conspicuous place chosen for Bertrand's statue which we see on the central mullion under a canopy. In the niches of the jambs are the figures of six benign bishops—probably his personal associates. In the tympanum of the arch are portrayed the Last Supper, the Ascension, and Christ Enthroned between the Angels. The two transepts were not finished until the fifteenth century. The original is, of course, in stone.

FOUNDER'S DAY

FOUNDER'S DAY this year will be celebrated on Thursday, October 18, at three o'clock in the afternoon. The program has not yet been completed but the Trustees hope that the event this year will be equal in popular interest to the high standard set in the past.

LIBRARY REFERENCE DEPARTMENT

BY IRENE STEWART, *Reference Librarian*



REFERENCE ROOM, CARNEGIE LIBRARY

A SHORT time ago two large envelopes were filed away in the Reference Department of the Carnegie Library, marked "Reference Questions of 1927." There were nearly 20,000 of them, and it had been the work of the reference librarians during the year to select and place before each inquirer the books that would tell him the thing he wished to know.

Librarians are sometimes asked, "What do you find to do all day?" It would be a pleasure to the reference librarians of the Carnegie Library to welcome these interested friends to a day behind the reference desk, to let them hear the requests as they come to us there, and see how we try to furnish to each reader the books that best serve his purpose. The principle on which we work is that whatever may be found in

print—and many things that cannot—we must find for him or assist him in finding. The Department is, in a word, Pittsburgh's Information Bureau, the natural place to come for assistance or suggestions in any matter connected with books or reading. This is a service which each citizen, through his taxes, helps to maintain, and upon which he is entitled to call at any time.

The Reference Room, on the second floor of the Library, is designed for those who wish a quiet place to study, for all who wish individual assistance in any line of reading or study, and for those who are in search of definite information or answers to questions. Here they will find a library of more than a hundred thousand volumes, the best books on all subjects, sets of bound magazines, long files of newspapers of

THE CARNEGIE MAGAZINE

Pittsburgh and other cities. Around the wall of the room are ten thousand books freely accessible to all. Assistants are at hand, ready to bring to the reader the books he wishes, to suggest books or to prepare lists of books on any subject, to look up the answers to questions and to offer every possible service in finding any information which the resources of the Library afford.

Our readers are men and women of all ages—students, professional men and women, business men and women, club women, people from all walks of life. What do they come for? What do they want to find out? The answer to these questions is the answer to that other question, "What does a reference librarian do all day?"

These are some of the things they want to know, and some of the subjects they wish to read about.

Tonnage of the Suez canal, 1920 to date.
License laws of Pennsylvania.
Wages in the steel industry in 1913 and now.
How to get in touch with some good business openings in Brazil.
What is the origin of the slogan "Stop, Look, Listen?"
Quotations of United States Steel on certain dates.
Organization of joint-stock companies.
Value of United States imports from England in 1835.
On what railroads is Macon, Georgia, situated?
Pennsylvania laws on slot machines.
Amount of wheat produced in the United States in 1906.
Some good after-dinner speeches.
Name of the Attorney-General.
Amount of roofing material manufactured in the United States in 1925.
How to address a letter to an archbishop.
List of companies incorporated in Pennsylvania in 1927.
Where in this country is there a complete file of "Reedy's Mirror?"
On what story of Galsworthy's is the play "Old English" founded?
How to make a genealogical chart.
What to name the baby.
Pictures of squirrels, meadow larks, toads, and sea weeds.
Meiklejohn and his experimental college.
Modern art.
A good poem to read at a birthday dinner.
Plans for small houses.

What foreign language newspapers are published in Pennsylvania?
How to plan a small garden.
Pennsylvania blue laws.
Stephen C. Foster.
Portraits of all the people in the Hall of Fame.
World Court.
Allied debt.
Prohibition.
Capital punishment.
A good book to give a man for Christmas.
Religious views of Thomas Jefferson.
The New England town meeting.
Requirements for teaching in the Philippines.
Date of Easter in 1929.
What day of the week was October 9, 1871?
The injury done to a child through fear.
An article in a magazine two years ago on Walter Camp.
Contemporary opinions of "The Beggar's Opera."
Educational reformers of the 19th century.
How to begin by one's self the study of Italian.
Occupations for the handicapped.
How many times did George Washington come to Pittsburgh?
Books that will help to improve one's English.
Did a man named William Harvey live in Pittsburgh between 1810 and 1819?
Early railroads of Pittsburgh.
What presidents have visited Pittsburgh and when?
River trade in Pittsburgh before 1850.
Tunnels and bridges of Pittsburgh.
How many people in Pittsburgh own their own homes?

Many requests come by letter or over the telephone. Often the information is given at once while the inquirer holds the line—a New York address, a stock quotation, the publisher of a book, the spelling or pronunciation of a word, the exact wording of a well-known quotation. Many times the person is called later and the information given. Two telephones are kept busy in this way, and many business men and others whose time is limited can testify to the convenience of this service.

The resources of the Reference Department include among its hundred thousand volumes certain collections worthy of special mention,—for example the most nearly complete file of Pittsburgh newspapers in existence, beginning with the Pittsburgh Gazette of 1786, the first volume of the first newspaper published west of the Alleghenies. All the Pittsburgh papers

have been bound since the opening of the Library, in 1895, and a great many of earlier years have been procured. The collection of books on local history is a very valuable one. Other special collections are, the Bernd Department of Architecture and Decoration, from which books may be borrowed by practicing architects and decorators; the Merz Collection of music; and, recently acquired, Dr. George F. Black's carefully selected library on the Gypsies. Recent issues of a hundred or more city and telephone directories are always available.

A convenience frequently used, but not known to all, is the photostat, by means of which photographic reproductions may be had of any pages, pictures, or maps in any book in the Library.

A typewriter is at the disposal of anyone who wishes to copy from books which may not be taken home.

Thousands of mounted pictures illustrating all kinds of subjects are available for home use. Ten thousand of these were borrowed last year.

The Periodical Room, a division of the Reference Department, contains in open racks and cupboards thirteen hundred current periodicals, and representative daily papers from a hundred cities in various parts of the country, as well as from London, Paris, and Berlin.

The day of a reference librarian is not a monotonous one. We never know, as a visitor comes to the desk, into what channels his question will lead, what path must be followed from book to book before an elusive fact or figure is found. If the reader, after using the books laid before him, brings them back and says, "There, that is just what I wanted to know," we feel that the search is well rewarded.

The practical value of using the Library is frequently shown, as, for instance, when we hear a business man say after finding the information he sought, "Well, that has saved me a trip to Washington," or, "I couldn't do

the work I do now if I hadn't had these books from the Library."

The amount of self-education that is carried on by young men and women, and older ones too, through the use of the Library, is far greater than one would suspect who does not constantly meet them and thus know the extent of their reading and study, done in their few spare hours.

We count no request too small to consider, and none too large to assist with as we can. One man comes in for a moment to find out how to spell a word, another comes day after day while he writes his book. We see the growth of many books, articles, and speeches, and we are frequently reminded of the rhyme which Magliabecchi, the old seventeenth century Italian librarian, wrote about himself:

Some say that, after all, his learning is not so great;
The learned grant him but librarian's state
And yet in sober truth it must be said
All go to him for flour to make their bread.

[Since this article was written the Pennsylvania Room has been opened. This room was described in the June number of the *CARNEGIE MAGAZINE*]

A BORROWED BOOK

A borrowed book is like a guest in the house; it must be treated with punctiliousness, with a certain considerate formality. You must see that it sustains no damage, it must not suffer while under your roof. You cannot leave it carelessly, you cannot mark it, you cannot turn down the pages, you cannot use it familiarly. And then, some day, although this is seldom done, you really ought to return it.

—WILLIAM LYON PHELPS

MR. ROCKEFELLER'S GIFT TO FRANCE

In addition to \$1,000,000 already given and helpfully expended, John D. Rockefeller, Jr. has given to the sister Republic of France \$1,600,000 for the restoration of national monuments. The French people bear in grateful remembrance the aid Mr. Rockefeller's previous gift afforded in the conservation of Versailles and Fontainebleau and in the restoration of Rheims Cathedral, damaged in the war. In promoting international good feeling, such gifts have a value far beyond that recorded in the monetary exchanges.



THE GOLDEN RAM IN THE GARDEN OF GOLD
PAINTED BY CHARLES J. TAYLOR, CARNEGIE INSTITUTE OF TECHNOLOGY

THE GARDEN OF GOLD

HERE is another view of the Garden of Gold—a water color by that gifted artist and humorist, Charles J. Taylor, who sends the picture from his summer home in Maine, with this note:

I am sending Jason, and I indicated where the gold is to go on the fleece. You will notice Jason has breeches on and sport stockings, also a shirt done up in Argo starch—this is a well-known starch in these parts. But he's bringing the fleece home, and that's the main thing.

Now, here's a pretty how-de-do! When Robert Garland sent us the name of Jason for our Gardener, we all understood that Jason had killed the magical ram at Colchis and brought its fleece away on the Argo. But here is the famous sheep alive and bleating, clothed in his wool of pure gold, and trotting about the Garden in a half-docile companionship with his master—half-docile, for you will see that he is pulling a little on his blue ribbon. Well, it's not the first time that history has had to be corrected, and some day we may have a new song telling us that "Every place that Jason went, the ram was sure to go." Right there in the offing, too, we behold Jason's renowned boat, the Argo. We believe in fairies, and we accept the ram, the golden fleece, and the Argo, just as Mr. Taylor has seen them through his inner eye. Let's keep the Argo right where Mr. Taylor has anchored her, for it is an easy flight of fancy to see that boat soon laden with precious gold, which will be transmuted into many things that will promote the work of the Carnegie Institute and the Carnegie Institute of Technology for the enrichment of the eternal spirit of our race.

And now that everybody is home from happy and healthful vacations, there are many delightfully encouraging things to be reported.

While Jason was eternally at work through the hot weather he had many visitors to cheer and reward his labors.

First came Miss Catherine M. Allan from Cleveland with \$150 which was raised through a rummage sale by the Carnegie Women's Clan in that city for Carnegie Tech 1946 endowment fund. It was a touching tribute from loyal daughters, who, though far away, can never forget the necessities of their Alma Mater. In 1946 their sum will grow to be \$402, the Carnegie Corporation will add \$804, and the total amount will be \$1,206.



EUGENIA BRUNOT

Then came a group—a large group—of many women and one man who constitute the graduates of the Carnegie Library School. Miss Eugenia Brunot carried the purse and when Jason looked into it he found \$1,000 in golden doubloons—the second contribution of that size in this year to come from these enthusiastic givers. The money goes into the Carnegie Institute fund, in 1936 it will amount to \$1,638.60, and the Corporation will add \$1,638.60 making the total \$3,277.20.

"Why, how do you do, Mr. DuPuy!" shouted Jason, as that indefatigable



HERBERT DUPUY

giver entered the Garden of Gold for the fourth time in one year. "I wonder," mused Jason, speaking aloud, "I wonder what kind of golden seed you are bringing this time?" Well, Mr. DuPuy handed the Gardener

\$1,000 in good piasters which enabled the Carnegie Museum to purchase the Ortmann Library as told on another page. In 1936 Mr. DuPuy's money will be worth \$1,638.60 and the Corporation will add \$1,638.60 making the total \$3,277.20. "Good-by, Mr. DuPuy," said Jason, and then with a broad smile, "Come again, sir!"



JOHN L. PORTER

their second gift of that amount within the year. In 1946 this sum will grow to be \$40,200.

Jason now heard the sound of trumpet and drum and looking up saw the Kiltie Band, with the flag of our country in front, and playing their swelling music,



DONALD L. PUTT

followed by a great company of Tech students—both men and women. And when they had halted Donald Putt, president of the Tech Student Council, gave him \$8,500 in the name of that organization for the Tech fund, suggesting that when the 1946 settlements are made, their sum be used toward the construction of a Students Activity House. The Gardener took their money and promised to be guided by their wishes. Was it not a beautiful forethought of these young men and young women—to look so far ahead in

providing for the welfare of their successors? What a fruitful thing is true gratitude! These students never forget their days at school, nor all the things that school gave to them. Out of these loyal hearts, year in and year out, will come other contributions, frequently through sacrifice, to make the great task a success at the end. In 1946 this amount will have multiplied into \$22,780, when the Corporation will add \$45,560, making a total of \$68,340.



MRS. ROBERT B. LEIGHOU

And then came Mrs. Robert B. Leighou with \$150 from the Carnegie Club of the Institute of Technology which the club would wish to go toward the erection of a Student Activities House, too. According to the

Corporation plan this amount will swell into the handsome sum of \$1,206 when 1946 comes round.

Then Mr. B. Preston Clark came all the way from Boston, where he resides, in order to give the Gardener \$100 as a Subscribing Member and to do some other things which are told elsewhere. And Jason was glad to plant his money in the common fund.

Since Adam delved, gardens have abounded upon the earth, and among the most beautiful are those in Pittsburgh and its suburbs. And so it seemed a natural thing for the women who constitute the Garden Club of Allegheny County to visit Jason in his Garden of Gold. And they made him a present of \$2,000 for a floral group that will represent a typical Pennsylvania roadside in the springtime as nature designed it, which, in spirit and in truth, made his heart glad and gave him new courage in his work.

"DISRAELI"

A Review of André Maurois' Biography

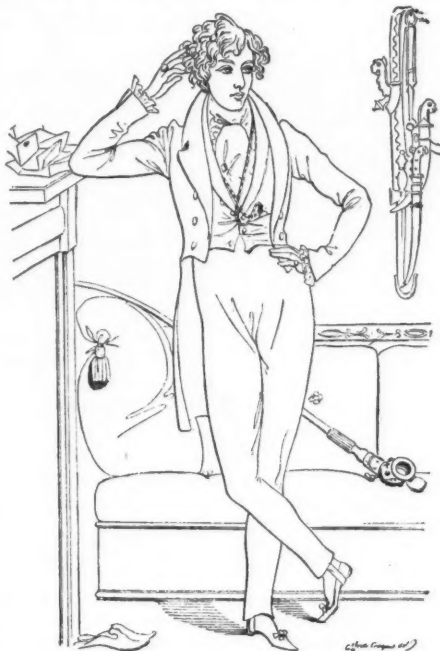
BY SAMUEL HARDEN CHURCH

THIS engaging volume holds a charm and merit which justify us in giving it a rank, not as the book of the month, but as the book of the year. M. Maurois

is a brilliant writer, and in assembling his materials for this full-drawn portrait of the great Prime Minister he shows a discriminating judgment in the relative importance of the essential facts in the spectacular career of his hero. He has naturally examined many authorities, most of them with rapid glances, but his chief source book must have been the monumental life by W. F. Monypenny and Lord Buckle, into

whose six volumes he has dipped his hand with a happy feeling that their biographical treasures should be used as raw materials for his own authorship. He displays a rare skill in the selection, adaptation, and arrangement of his information. Nowhere has he quoted too far from speeches or lingered too long upon episodes that would merely fatigue his readers. His narrative goes straight on in a sparkling flow until the end is reached, and then

we find that he has given us a comprehensive, fascinating, and truthful portrait of the most picturesque character of the Victorian age.



DISRAELI—"VIVIAN GREY" BY DANIEL MACLISE, R. A.

If Oliver Cromwell had not made himself Lord Protector of England, Benjamin Disraeli could not have made himself Prime Minister of that country. Finding that the Jews had been outcast from England for three centuries, Cromwell issued a decree which invited their return, and a hundred years after Cromwell's death there came to England a Benjamin D'Israeli, born in Italy and married to an Italian wife,

who amassed a fortune on the stock exchange and established a home in the country near London. His eldest son was Isaac D'Israeli, who read books incessantly and made notes about them, until his studies took form in two very readable volumes—"Curiosities of Literature" and "The Quarrels of Authors." While never forgetful of his racial stock, Isaac D'Israeli united with the Church of England, and his children were baptized into that establishment. Benjamin, the

future Prime Minister, one of this brood, was sent to school, and although he had been born in England the other boys tried to make him believe that he was not an Englishman. They were not intolerant, but they were fanatical. Very soon, however, he had become their leader. He was not so good at Greek and Latin, but in written compositions his imagination soared into worlds that were beyond their comprehension. He put on plays, keeping the hero parts for himself. One day a bigger boy insulted him, and Benjamin gave him a sock on the jaw, and was sent home. There he began to devour the books which his father had already mastered. When he told his dreams to his father—"Beware," said Mr. D'Israeli, "of endeavoring to become a great man in a hurry, my dear boy." And he was sent to study the law. But he only dreamed on, of Caesar and Napoleon. Then he began to speculate in stocks, lost all his savings, and found himself in debt for 7,000 pounds. A visit to Abbotsford and three weeks spent with Sir Walter Scott and the Lockharts stirred him to authorship, and he wrote "Vivian Grey" and "The Young Duke." This opened to him the noble company of authors, and Edward Lytton Bulwer was soon his best friend. He went to the Levant and wore the costume of a Greek pirate, his black curls making him look the part. He wrote other books. His sister Sarah worshipped him. Of one of his books she wrote:

"One reading has repaid me for months of suspense, and that is saying everything if you knew how much my heart is wrapped up in your fame. Wherever we go, 'The Young Duke' is before us, and its praises forever resounding. But I know you care nothing for family commendation."

And so he captured London. After that a seat in Parliament was a logical mark of his upward progress, and his name was now written Disraeli.

Then came his first speech, and nowhere in the history of public oratory was there ever such a tragic failure. When the young member arose, the House beheld a tall and delicate figure dressed in a bottle-green coat, a white waistcoat covered with gold chains, and a flowing black cravat. Hyperion's curls were there; the front of Jove himself; an eye like Mars, to threaten and command; but somehow the warrior seemed hidden by the popinjay. The question concerned a subscription to furnish Protestant candidates with funds to fight their Catholic opponents in Ireland.

"This majestic mendicancy," he began, and there was a titter of laughter. "I do not affect to be insensible to the difficulty of my position." That might have caught their sympathy, but it did not, and they laughed. "I am sure I shall receive the indulgence of honorable gentlemen." This appeal only brought more shouts of ironical laughter. "But I can assure them that if they do not wish to hear me, I, without a murmur, will sit down. [Applause and laughter] I wish I really could induce the House to give me five minutes more. [Roars of laughter] I stand here tonight, sir, not formally, but in some degree virtually, the representative of a considerable number of members of Parliament. [Great laughter] Now, why smile? [Roars] Why envy me? [Hurricane of laughs] Why should I not have a tale to unfold tonight? [Explosion]"

He had now become the hapless object of their derision, and their shouts of laughter prevented him from completing a single sentence. But still he kept on, endeavoring to employ some of the classical and rhetorical phrases which he had so carefully prepared, only to have his efforts broken up with howls of mirth. He spoke with good temper, although his courage was aflame. "I have begun several things many times," he said, "and I have often succeeded at last—although many had

predicted that I must fail, as they had done before me. [Howls of laughter and cries of 'Question!']" But they had now aroused the lion within him. Raising his hands and striking an attitude which for a moment forced a calm upon the storm, he shouted: "Aye, sir, and though I sit down now, the time will come when you will hear me."

And after that his voice became the organ trumpet of majestic England.

He married a rich wife who adored him and to whom he was always Romeo. When they were both ill and in separate rooms, they spent the time in writing love notes to each other.

When by his superb eloquence, his intrinsic command, and his pride in the traditions of the British Empire he gained the post of Prime Minister, Queen Victoria held back her approbation until she had learned the value of his worth, when she gave him her confidence and affection.

And well she might, for this book reveals that it was the ambition of Victoria rather than the magnificence of Disraeli which gave her, against a considerable opposition from her people, the new glory in her titles of Empress of India.

When Russia and Turkey had finished their war they formulated a peace through which they sought to distribute the rich prizes of the world be-

tween themselves and Germany. Disraeli went to Berlin in attendance upon the peace congress, and when he had listened to the astounding proposals which bore with such blighting effect upon the commercial interests of his own country he intimated to the rapacious statesmen that the British Navy was prepared to engage their three

combined forces, and said that he would order a special train to take him home at four o'clock that afternoon. As they gazed with consternation upon his tense face he strode from the room, but just before the hour arrived Bismarck came to tell him that he might dictate the terms of the treaty, whereupon he flashed that triumphant message to his Queen: "We have secured peace with honor."

Disraeli, while a conservative in politics, was an

embodiment of the free spirit of the English nation, while Gladstone, his great antagonist, a liberal in politics, was conservative to the point of hypocrisy in standing for the mere formulas of conduct. When the picturesque Premier passed away, Victoria, who loved him as one of the pillars of her Empire, erected a monument bearing this inscription: "To the dear and honored memory of Benjamin Earl of Beaconsfield this memorial is placed by his grateful sovereign and friend, Victoria R. I."



LORD BEACONSFIELD

APPROPRIATIONS

THE Board of Trustees of the Carnegie Institute at a meeting on Tuesday, July 10, authorized the following appropriations for the current fiscal year beginning July 1, 1928:

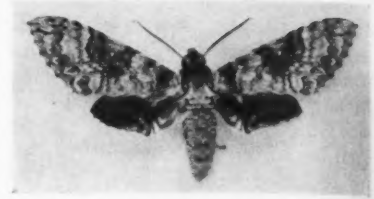
Fine Arts Department \$105,000; Museum Department \$111,250; Building Operation and Maintenance \$147,500; Carnegie Library School \$20,000; Administration for Auditor, Assistant Treasurer, etc. \$33,000; Contingent Fund \$11,500; Carnegie Institute of Technology \$1,426,250; making a total revenue for expenditures during the next twelve months of \$1,834,480. No part of these funds is contributed by the City of Pittsburgh but all of them are derived from endowments provided by Andrew Carnegie.

THE CLARK COLLECTION



MR. B. PRESTON CLARK has been appointed Honorary Curator of Lepidoptera at the Carnegie Museum. He is an entomologist of distinction, devoted to the study of hawk moths. This family of moths

bears the name of Sphingidae, and is scattered all over the world, numbering about 1,450 different known forms. Through untiring efforts, Mr. Clark has assembled by far the largest collection in the world on this group, exceeding in completeness any similar one preserved in public institutions, or kept in private hands, anywhere on either hemisphere. It includes the superb material accumulated by the late Charles Oberthür, the celebrated French entomologist, who in turn owned the great collections of Boisduval and Guenée. This ex-



PROTOPARCE BRONTES HAITIENSIS
Haitian hawk moth discovered and described by Mr. Clark

ceptional scientific collection has been deposited by Mr. Clark, in its major part, in the Carnegie Museum for safe-keeping, since he has very kindly indicated the desire that it shall ultimately become the property of the Museum in perpetuity, and be arranged together with the Museum's excellent collections on Sphingidae and those which have been formed by Dr. William J. Holland. Mr. Clark has also transferred to the Museum over seventy volumes of carefully classified correspondence with his numerous entomological friends.

He is an industrialist associated with several concerns of national reputation, and holds the position of Vice President of the Plymouth Cordage Company. He is a graduate of Amherst, and he became an honorary alumnus of the University of Pittsburgh at its last commencement, when he received the degree of Doctor of Science.

—A. AVINOFF

THE ORGAN RECITAL SEASON OPENS

SATURDAY, October 6, and Sunday October 7, will mark the opening of the thirty-fourth free organ recital season at Carnegie Institute. Thereafter the organ concerts will be given in Carnegie Music Hall by Dr. Charles Heinroth each Saturday evening at 8:15 o'clock and Sunday afternoon at 4:00 o'clock.

"THE PLAY'S THE THING"



OTTO H. KAHN

THE OTTO H. KAHN Prizes, established by Mr. Kahn recently for the students in the Department of Drama of Carnegie Institute of Technology, were awarded for the first time at commencement this year.

Mr. Kahn, always keenly interested in the spoken drama, has thus signified his sympathy with the theatre of Carnegie Tech in its fostering of the cultivation of this art. Patron of so many good and worthy things, he feels that the drama "is deep-rooted in the instincts and emotions of the people. Its appeal is direct and universal. Its influence is wide as well as deep and abiding. It is a many-sided form of art. Speech, literature, dancing, music, design, decoration, painting, architecture, and various mechanical sciences are all employed in it. The human facul-

ties and graces, the expression of human character, are developed by it. For its enjoyment people of the most diversified strata of society are united in common understanding, common feelings, common reactions. It is a powerful force for social good as well as for educational advancement."



IRENA KOSINSKA

Towards such an interpretation of its mission is the Tech Little Theatre striving, and with such encouragement



DONALD B. WILLSON

and recognition as that manifested by Mr. Kahn it will continue to produce lively and interesting plays, while the future will tell what actors and actresses of tomorrow had their early training on its stage.

The committee of award, consisting of Glendinning Keeble, B. Iden Payne, and Chester M. Wallace, recommended that the prizes of \$250 each go to Irena Kosinska and Donald Bellows Willson for acting, and to Maxine Finsterwald for playwriting. Miss Kosinska is now in rehearsal in New York; Mr. Willson, after taking juvenile and character roles at the Mt. Gretna Theatre this summer, goes this month to Chicago to play the season of repertory in the Goodman Memorial Art Theatre; while Miss Finsterwald, after spending the summer directing dramatics at Camp Hiawatha in Kezar Falls, Maine, will study and



MAXINE FINSTERWALD

write in Detroit this winter. One of her one-act plays, "Checkmates," which was given by the Stage and Play Society last winter, will be produced in Chicago this fall.

THE ORTMANN LIBRARY



DR. ARNOLD E. ORTMANN

THROUGH the generosity of Mr. Herbert DuPuy, who has donated to the Institute a sum of one thousand dollars, the Museum is able to acquire the scientific library of the late Dr. Arnold E. Ortmann. This noted naturalist for many years occupied the position of Curator of Invertebrates in the Carnegie Museum, and was widely known in America and in Europe as a leading authority on invertebrates and on zoogeography. He was especially renowned for his classical studies on crustaceans and on the distribution of fresh-water shells, which constitute a very valuable documentation throwing light upon the life of previous geological periods and on the details of geographical configurations of continents in the past. Dr. Ortmann accumulated his library during many years of his studies. It contains over thirty-six hundred works, the major part of which are monographs frequently comprising several volumes. Over thirty of the major items contain over five hundred pages and more, including some monumental works considered as classics in scientific literature. Besides hundreds of similar monographs, there is a large collection of separata which Dr. Ortmann obtained from his numerous scientific correspondents—reprints of various European and American publications. It is a precious addition to the library in the

possession of the Museum, and is of vital importance for the progress of further study on invertebrates in our laboratory. The collection of books assembled on the crustaceans and mollusca is especially complete for the taxonomical research in these branches. It would be difficult to duplicate this library, and the Museum is indeed happy in being thus enriched through the liberality of Mr. DuPuy, who selected such an apt way to commemorate our late Curator.

—A. AVINOFF

THE KNOXVILLE-CARRICK BRANCH

WITH the recent establishment of the Knoxville-Carrick branch the Carnegie Library of Pittsburgh continues to make access to books easier for the people of its city. This new branch which was formally opened on July 18 is located in the Rochelle School Annex at Knox Avenue and Rochelle Street and has a collection of some 4,000 books on its shelves. It is headed by Miss Eleanor McCann as Adult Librarian and Miss Helen Studer as Childrens Librarian.

This makes the tenth branch to be added since the inception of the main library in Pittsburgh in 1895.

EACH YEAR GREATER CROWDS

A review of the attendance upon the Internationals in the past six years shows an ever-increasing interest in these Exhibitions, with the figures for 1927 more than tripling those of 1922.

Twenty-first International	38,282
Twenty-second International	44,055
Twenty-third International	58,340
Twenty-fourth International	133,275
Twenty-fifth International	114,326
Twenty-sixth International	124,344

Public enthusiasm indicates a larger attendance than ever at the Twenty-seventh International.

THE NEW GENERATION

Excerpts from the Commencement Address to the Graduating Class of Carnegie Institute of Technology on June 5, 1928, in Music Hall

BY WALTER LIPPMANN, of the New York World



You belong to the generation which will take charge of American affairs about thirty years from now, that is to say, about 1960. A few of you who have exceptional talent will make an impression upon events

somewhat sooner. But most of the members of your generation will not have reached places of authority until they are about fifty years old.

* * * *

I have said that no one would tell you the answers to the problems that your generation will have to solve. Is it possible at least to describe the problems without attempting to answer them? In a general way that is possible, I think, and so I am going to take the liberty of outlining for you what in my opinion are a few of the central problems which your generation is compelled to face. I shall offer you no conclusions. The problems I am going to describe are in my judgment unanswerable at this moment, and anybody who thinks he has an answer is almost certainly fooling himself. These problems have only begun to make themselves felt in my generation, and I will tell you frankly that my generation will do very well indeed if it succeeds in defining clearly what these problems are.

The first of the problems arises out of the fact that within the last few decades the center of power in the world has passed from Europe to America. This is one of the greatest events in the

history of mankind. The civilization that you and I inherit had its origins somewhere in the region where Europe and Asia meet.

Within a period so brief that even a man of my age has seen the whole of it, the United States has been transformed from a relatively unimportant province in the civilization created by the European white man into a power whose influence is decisive in every corner of the world. No nation ever became so powerful so quickly, so unexpectedly, and with so little preparation.

* * * *

Nobody has any clear notion today of what the new power of the United States is, or what responsibilities go with it. The hesitancy and the confusion which you have noticed all through our foreign policy for the last fifteen years, from President Wilson's attempt to intervene in Europe to President Coolidge's experiments in Nicaragua, are the proof that nobody in authority as yet understands the new American position in the world, and the rights and duties which go with it.

The second great problem which your generation will have to deal with arises out of the dominance of great urban industrial centers. The American system of government and the American political tradition were established in a country in which life on the land was the characteristic way of living. That is no longer true. Even the farmer in America today is really a kind of suburbanite. The cities have grown so big that they overshadow the countryside, and set the pace and tone of American life. Our whole domestic policy for fifty years has tended to build up these great concentrations of people in cities,

and it does not require great powers of prophecy to say that a nation dominated by people in cities is bound to be a very different kind of nation from one dominated by people living on farms.

* * * *

But there is a still deeper question than either of those I mentioned, a question which each of you is bound to encounter in the most intimate portions of your lives. I can perhaps best indicate the nature of this question by saying that there are certain signs which indicate that the generation to which you belong is more than a little bored with the agitations of the generation to which I belong. I refer particularly to that excited dispute in the realm of morals between those who want to impose upon us all the commandments of their consciences, thinking their consciences are inspired, and those who think that by obeying their instincts they can realize their possibilities and find happiness. You can easily identify the combatants on each side. The army of those who fight for conscience call themselves conservatives; their opponents call them reactionaries, fundamentalists, patrioteers, puritans, Victorians, bluestockings, and bluenoses. Those who fight for instinct, temperament and self-expression call themselves liberals. Their opponents call them licentious, pagan, barbarous, crack-brained, morbid, radical, and red.

At the root of all conservatism there is a belief that civilized and enduring happiness can be achieved only by regulating the natural desires of men. There are many kinds of conservatism, but they are all agreed, I think, that our passions, instincts, and impulses, if left to run wild, would disorganize society and reduce the individual to confusion and despair. Every conservative believes that the natural man is a bundle of passions, each of which is capable of incalculable evil, and that civilization depends upon setting up some kind of authority outside the man or inside him to keep his various passions within

limits and to organize them harmoniously.

Liberalism, on the other hand, has always been based on a much more optimistic view of human nature. The liberal almost invariably assumes that man is naturally good, and that he becomes morally perverted and deformed by being compelled to conform to artificial and tyrannical rules.

* * * *

You are going out into a world where there no longer exists a generally accepted moral code, a world where all the conditions that determine conduct are in dispute. You inherit the results of four centuries of criticism and skepticism as to the nature of morals, the source of morals, and the sanctions for morals. You will live in a generation for whom the revealed and dogmatic basis of morals no longer has its old authority.

The results of this must already be apparent to you. They appear as a kind of bewilderment in the souls of men as to what constitute the real objects of life. The bewilderment works itself out in many forms. In a lust for power. In a lust for wealth. In a lust for excitement. And then again in frustration and sheer nervous instability. The man who goes mad about making money, the man who goes mad seeking publicity, the man who goes mad seeking pleasure and thrills and escaping boredom, and the man who is all nerves and confusion and bad dreams and fears are all symptoms of an age that has ceased to have any central ideal of human life.

The generation which has preceded yours, especially the last four or five generations, lived under the spell of an enormous illusion. They believed that if you could destroy the authority of the ancient traditions of mankind and free men of the tyranny of the old authorities, man would then be emancipated and happy. They imagined that man was so naturally good, that his instincts were so naturally right, that if only you let him follow his impulses

he would create a heaven on earth. Your generation and mine can no longer believe that.

Its task, therefore, is to recover without the help of dogmatic authority and by its own critical insight alone that wisdom in the art of life which men once received as tradition from their ancestors. The age which is passing was full of men who had marvelous critical power in showing where the established moral codes interfered with free and happy living.

* * * *

But you, while retaining their powers

of criticism, and all that goes with them of hatred of sham and fake and buncombe and hokum and false sentiment and false spirituality, will have to develop also your power of imaginative insight. For you will have to go beyond telling the world what you disbelieve. You will have to find out what you do believe.

My generation . . . awaits with great eagerness the appearance of a new generation of thinkers who know how to do something besides rummage about in the rubbish heap left by old rebellions, and are ready to begin building a habitation for the modern soul.

DETROIT AND PITTSBURGH

THE Editor had the good fortune recently to spend two days in Detroit, and declares without hesitation that Detroit is the most beautiful city in America with the single exception of our national capital. Chicago, St. Louis, Cleveland, and Pittsburgh are large and important cities, but they are older in physical structure and all of them lack the newness, the happy affluence, and the wealth of architectural beauty which is seen on every hand in Detroit. Perhaps it might be said that as the home of the automobile industry Detroit's physical growth has been somewhat more rapid than her intellectual development, but the spread of wealth among her people is being used with an appreciation of culture which shows itself in handsome art galleries, noble churches, public schools, private residences, wide avenues, and majestic towers of commerce, all of which are bound to make their impress upon the mind of the community. Back of all this material creation it is not difficult to recognize a unified spirit of enterprise on the part of her whole population which must be largely accountable for the fame in which Detroit is held by the country at large.

Have we reached this unity of enterprise in Pittsburgh? It is true that great things are being done here. One of the striking proofs of a broad vision based upon public necessity was the acquirement recently through the action of our County Commissioners, Messrs. Babcock and Armstrong, of the large acreage outside of our city boundaries which constitute the North and South Parks, and which the automobile has made so easily accessible to our people. We also have many broad highways, and we can vie with Detroit in our towers of commerce, our theatres, our art galleries, our churches, and our school buildings. We do not have anything like the same number of handsome residences through mile after mile of suburban territory, and we are sadly lacking in the hotel facilities which have made Detroit a popular convention city. A Detroit man said, "Pittsburgh should have at least three more large and first-class hotels," and when he was asked where would the people come from to make the hotels a paying investment, he replied, "You will get the people when you get the hotels. At the present time you only get the man who must go to Pittsburgh."

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And this statement seems to be a sound one.

But Pittsburgh should go forward in a spirit which will anticipate the needs of her population rather than trail behind those necessities with laggard steps. We should have more parks, playgrounds, and many more boulevards. Detroit took the automobile away from us because we were asleep. We never saw that rich vision of the automobile until it was gone. And we shall in like manner lose the airplane industry unless we unite in establishing that enterprise here without delay. We need to develop the habit of business cooperation in Pittsburgh in order to make our industrial supremacy secure.

THE MAKING OF WILLS

Is it not an apposite suggestion that the Carnegie Institute and the Carnegie Institute of Technology deserve to be remembered by some provision in every will that is drawn in Pittsburgh because of their services to the community and to the world itself?

In making a will, money left to the Carnegie Institute should be covered by the following phrase:

*I do hereby give and bequeath to the
CARNEGIE INSTITUTE in the City
of Pittsburgh, Pennsylvania*

And bequests to the Carnegie Institute of Technology should be phrased like this:

*I do hereby give and bequeath to the
CARNEGIE INSTITUTE OF
TECHNOLOGY OF PITTS-
BURGH, PENNSYLVANIA*

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